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Response To Comments On Amendments to:

310 CMR 7.70 "Carbon Dioxide (CO₂) Budget Trading Program"

Regulatory Authority:
M.G.L. Chapter 111, Sections 142A through 142E
and Chapter 21N, Section 2(a)

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Contents

<i>I</i> .	Regulation History and Notes3		
II.	Public Comment Process		
III.	Comments and Responses4		
	A.	Climate Change Impacts	4
	B.	Level of the Cap, Rate and Schedule of Decline	4
	C.	Program Design	<i>6</i>
	D.	Economic Impacts	7
	E.	Cost Containment Reserve	7
	F.	Legal Issues	8
IV.	Lis	et of Commenters8	

I. Regulation History and Notes

The regulations at 310 CMR 7.70, the Massachusetts CO₂ Budget Trading Program, implement the Regional Greenhouse Gas Initiative (RGGI) in the Commonwealth. RGGI is a cap and trade program that limits the carbon dioxide (CO₂) emissions from fossil fuel fired electricity generating units in the Commonwealth, and the RGGI region, that are greater than 25 megawatts. The regulations also require applicable fossil fuel fired electricity generating units to account for their CO₂ emissions and purchase one RGGI CO₂ allowance for each ton of CO₂ emitted at the facility. Each of the RGGI participating states¹ has similar regulations to implement the RGGI program in those states.

The Massachusetts Department of Environmental Protection (MassDEP) recently proposed amendments to 310 CMR 7.70 - The Massachusetts CO₂ Budget Trading Program. The proposed amendments to 310 CMR 7.70 implement the program changes contained in the RGGI Updated Model Rule² and the RGGI 2012 Program Review Recommendations Summary.³ The changes contained in the RGGI Updated Model Rule were agreed to by the nine RGGI participating states after a comprehensive two-year program review. Those changes strengthen the RGGI program, make it more effective, and realign the regional cap with current emissions levels, which are significantly lower than the current regional cap.

The amendments to the regulation include:

- A reduction in the regional CO₂ budget (the RGGI cap) for the years 2014 through 2020,
- Adjustments to the RGGI cap in the years 2014 through 2020 to account for the existing bank of allowances held by private parties,
- The establishment of a Cost Containment Reserve (CCR) to mitigate price spikes, should they occur, by providing a limited quantity of allowances in addition to the cap if established price thresholds are exceeded,
- Updates to the RGGI offsets program, including a new forestry protocol,
- The creation of interim control periods, which require a partial compliance demonstration in the first two years of each three year control period, and
- Numerous administrative updates, including updates for all documents incorporated by reference.

The amendments discussed in this document were proposed for public hearing and comment in June 2013. The proposal is described in a Technical Support Document which is available on MassDEP's web site at: http://www.mass.gov/eea/docs/dep/service/regulations/proposed/770tsd13.pdf

II. Public Comment Process

MassDEP held one public hearing and solicited oral and written comments on the proposed amendments to the 310 CMR 7.70 regulations in accordance with MGL Chapter 30A. On June 28, 2013, MassDEP published in two newspapers, the Boston Globe and the Springfield Republican, notice of the public hearings and public comment period on the proposed regulations and amendments, and notified interested parties via electronic mail on July 1, 2013. The public hearing notice was published in the Massachusetts Register on July 19, 2013. The public hearing was held at MassDEP's Boston office on Monday, July 29, 2013. The public comment period closed on August 8, 2013.

Page 3 12/6/2013 Final

¹ Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont

² http://rggi.org/docs/ProgramReview/ FinalProgramReviewMaterials/Model Rule FINAL.pdf

³ http://rggi.org/docs/ProgramReview/_FinalProgramReviewMaterials/Recommendations_Summary.pdf

III. Summary of Comments and Responses

This document summarizes and responds to relevant comments that were received during the public comment period. MassDEP appreciates the input from those who participated at the public hearing and submitted written comments. A full list of commenters is listed at the end of this document.

A. Climate Change Impacts

Comment: Climate Change may increase the likelihood of [ground-level] ozone formation and make it harder to reduce through conventional measures such as reducing smokestack and tailpipe emissions. This will increase the challenge to meeting future national ambient air quality standards for ozone. (American Lung Association)

Response: MassDEP agrees.

Comment: RGGI is a significant and concrete action toward combating climate change in our region. Further, the benefits of reducing co-pollutants that contribute to smog and acidic particle pollution are significant. (Appalachian Mountain Club)

Response: MassDEP agrees.

Comment: The adjustments to RGGI would align it with Massachusetts' goal of an 80% reduction in greenhouse gas emissions by 2050. Further, an assertive cap is likely to benefit the RGGI states in meeting future New Source Performance Standards (NSPS) for existing GHG sources under federal Clean Air Act requirements. (Appalachian Mountain Club)

Response: MassDEP agrees that the RGGI amendments further Massachusetts' climate goals and the ability to meet future NSPS standards for existing sources.

B. Level of the Cap, Rate and Schedule of Decline

Comment: Many of the Commenters support the proposed amendments to 310 CMR 7.70. (American Lung Association, Appalachian Mountain Club, Conservation Law Foundation (CLF), Environment Massachusetts, E2 New England, Environment Northeast (ENE), more than 850 individual residents of the Commonwealth via email, 782 individuals via Environment Massachusetts petition, Northeast Energy Efficiency Partnerships, New England Clean Energy Council, and Harvard University)

Response: MassDEP appreciates these comments and is finalizing the amendments as proposed.

Comment: The new regional cap of 91 million tons, set forth in the Model Rule, enhances the efficacy of RGGI and will enable the program to deliver meaningful reductions in greenhouse gas emissions in an economically beneficial manner. (CLF)

Response: MassDEP agrees.

Comment: Implementing the proposed reduction in the RGGI cap to 91 million tons will strengthen RGGI's reputation as a model climate policy immediately, and revisiting the cap reduction in 2016 will assist Massachusetts and other states in achieving long-term emission reduction targets. (ENE)

Response: MassDEP agrees.

Comment: One Commenter suggested RGGI should include a less drastic reduction in the cap than proposed. This commenter stated that CO₂ emissions from regulated units during the last few years have been unusually low because of the economic recession, which dampened demand for power, and because the price of natural gas has been very low, which has lead to significant switching from coal to gas generation. (NRG)

Response: As part of the 2012 program review, MassDEP used electric-sector models to evaluate several different regional emissions caps. In order to ensure a robust assessment, for key variables, MassDEP analyzed economic growth and fuel prices, included projections from respected sources such as the US Energy Information Administration, and published assumptions for stakeholder review during the modeling process, and conducted sensitivity analyses across several different scenarios. MassDEP used this information to inform the selection of the cap level. Therefore, MassDEP is confident that the proposed cap appropriately accounts for key variables, such as fuel prices and economic growth, and is finalizing the cap as proposed. MassDEP notes that the addition of a cost containment reserve provides additional protection against allowance price variability, and that the level of the cap will be considered again during a comprehensive program review no later than 2016.

Comment: Four different commenters noted that in the proposed regulations, the annual allowance budget is calculated by subtracting 2.5% from the prior year's cap, rather than subtracting 2.5% of the baseline year's cap. The commenters point out that this is a departure from the initial RGGI program and leads to fewer reductions in emissions over time. By 2050, annual reductions of 2.5% from the prior year yield a total reduction of 59%, compared with a 90% reduction when annually reducing by 2.5% of baseline year emissions. All four commenters suggest revisiting the reduction calculation methodology as part of the 2016 RGGI Program Review to better align with the Commonwealth's long-term greenhouse gas emission reduction goals. (ENE, CLF, New England Clean Energy Council, and E2 New England)

One of these commenters also noted the "plateauing" of the RGGI cap in 2020 and suggested addressing this issue as part of the 2016 RGGI Program Review. (CLF)

Response: The RGGI Agency Heads have committed to conduct ongoing program evaluations to continually improve RGGI and more specifically to commence comprehensive program review no later than 2016 to consider program successes, impacts, potential additional reductions to the cap post-2020, and other program design elements (see the document *RGGI 2012 Program Review: Summary of Recommendations to Accompany Model Rule Amendments*) at:

http://rggi.org/docs/ProgramReview/_FinalProgramReviewMaterials/Recommendations_Summary.pdf As part of the 2016 program review, the participating states will evaluate the RGGI cap reduction rate and schedule, including consideration of statutory obligations for GHG reductions by the participating states.

C. Program Design

Comment: RGGI, by design, operates as a tax on fossil generators. (NRG)

Response: MassDEP disagrees. Under RGGI, the environmental regulators set the environmental goal of the program (the cap level) and the market determines the allowance price (\$/ton).

Comment: The state's program should enhance the ability of the electric generation sector to invest in low carbon supply side solutions – instead of simply requiring the generation sector to pay for another sector's deployment of energy efficiency programs through an increasing tax burden. (NRG)

Response: By establishing a cost associated with the emissions of carbon dioxide (CO₂) by electric generating units, the RGGI program is creating an incentive for producing electricity by no or low carbon generating resources. This is true because in a competitive market where the marginal unit is likely a fossil unit, all

electricity generated (including that generated by low and no-carbon units) will be compensated at a rate which includes consideration of the carbon cost of the marginal unit.

Comment: RGGI is flawed by its regional nature. Only a broad national, and ultimately an international, regulatory framework can effectively address climate change. Lowering the cap runs headlong into a major design flaw inherent in any regional program: the relocation of generation (and associated emissions of CO₂ and criteria pollutants) from the RGGI States into nearby non-RGGI states. (NRG)

Response: MassDEP agrees that a broad national/international regulatory framework will be the best framework to addresses climate change. In recognition of that fact, the Commonwealth, along with other RGGI participating states, is engaging with the United States Environmental Protection Agency as it endeavors to develop national greenhouse gas emission guidelines for existing and modified electric generating units under section 111 (d) of the Clean Air Act (CAA) and emission limitations for new electric generating units under section 111 (b) of the CAA.

In the meantime the RGGI Participating States have committed to address the potential for the relocation of generation from the RGGI states into nearby non-RGGI states that the commenter references (see Principle IV. Emissions Leakage in the document RGGI 2012 Program Review: Summary of Recommendations to Accompany Model Rule Amendments at:

http://rggi.org/docs/ProgramReview/_FinalProgramReviewMaterials/Recommendations_Summary.pdf).

Comment: Because RGGI affects only units that serve an electricity generator with a nameplate capacity equal to or greater than 25 MW, RGGI advantages smaller units, which generate significantly higher CO₂ and criteria pollutant emissions on a lb/MW basis. (NRG)

Response: As part of the original RGGI program development, the participating states evaluated applicability thresholds lower than the 25 MW threshold. After considering options on the applicability threshold, the states agreed on the 25 MW level. The states determined that more than 98 percent of the in-region carbon dioxide emissions from the electric generating sector would be covered at this applicability threshold. The states further recognized that the number of facilities covered under the program increased dramatically with lower applicability thresholds, adding significant regulatory burden and costs to the state agencies implementing the program and to the regulated community, particularly small businesses.

In addition, MassDEP notes that the participating states, since the launch of the program, have monitored relative changes in emissions associated with electricity generation from units subject to RGGI versus small fossil fuel-fired electric generators in the RGGI region that are not subject to RGGI. The monitoring results do not show an increase of annual CO₂ emissions from small fossil fuel-fired electric generators in the RGGI region that are not subject to state CO₂ Budget Trading Program regulations in the first three years of the program, 2009 through 2011.

The participating states have released an annual report summarizing the above referenced monitoring efforts and results. The link to the third (and most recent) in a series of annual monitoring reports reflecting actual data through 2011 can be found at:

http://rggi.org/docs/Documents/Elec_monitoring_report_2011_13_06_27.pdf

The participating states have committed to continue to monitor relative changes in emissions associated with electricity generation from units subject to RGGI versus small fossil fuel-fired electric generators in the RGGI region that are not subject to RGGI.

Comment: RGGI should create programs that encourage private investment in low- and no-carbon generation particularly through financing incentives for replacing coal plants with cost effective combinations of renewable

energy and efficient natural gas plants, enhanced renewable portfolio standards, and provisions to expand clean and resilient distributed energy resources. (NRG)

Response: The Commonwealth and the participating states are implementing numerous policy measures within the electric generating sector to affect the transition to low- and no-carbon generating sources including: renewable portfolio standards, long term contracts for electricity purchases from low- and no-carbon sources, and various programs that provide technical and siting assistance to project developers.

D. Economic Impacts

Comment: The proposed amendments will support economically beneficial investments in energy efficiency for Massachusetts residents and businesses. (Northeast Energy Efficiency Partnerships)

Response: MassDEP agrees.

Comment: RGGI has been economically beneficial for Massachusetts and the RGGI states as a whole. RGGI has produced actual, measurable results, not only in terms of promoting reductions in greenhouse gas emissions, but in economic benefits to the participating states. (CLF)

Response: MassDEP agrees.

Comment: Massachusetts has realized significant benefits from RGGI to-date, and the state will realize far greater benefits by implementing recently agreed reforms and continuing to invest program revenues in energy efficiency. (ENE)

Response: MassDEP agrees.

E. Cost Containment Reserve

Comment: One commenter suggested lowering the trigger for the cost containment reserve to further guard against leakage driven by high allowance prices. (NRG)

Response: MassDEP believes the cost containment reserve as proposed is the appropriate size (quantity of allowances available) and the price triggers are set at the appropriate levels to provide a balance of environmental goals and cost containment. The extensive electric system and macroeconomic modeling conducted by the participating states supports these policy decisions. MassDEP is finalizing the amendments as proposed.

F. Legal Issues

Comment: RGGI may attract litigation from those materially disadvantaged by the program's design flaws and private investment will be limited and made more costly by the legal uncertainties and risks created by the RGGI framework. Therefore, the RGGI program needs a complete overhaul. The legal concerns come from the fact that RGGI arguably imposes an unconstitutional tax by requiring each covered fossil fuel-fired units in the state to purchase allowances equal to tons of CO₂ emitted from each plant in a given year. This is arguably a tax not a fee, under Massachusetts law. The Massachusetts Constitution grants only the legislature the power to levy taxes. Although the statute lays out how the revenues from the sale of RGGI allowances may be used, it does not constrain the prices of allowances. The legislature, in delegating its authority to tax to MassDEP and DOER, also may have violated Massachusetts law and the constitutional separation of powers and non-

delegation doctrines by failing to specify any guidance, standards, or constraints for MassDEP to follow in administering the tax on power plants. (NRG)

Moreover, RGGI may violate the U.S. Constitution – specifically the Compact Clause – by encroaching on federal supremacy as an unconstitutional multi-state compact. It also may conflict with section 102(c) of the federal (CAA), which does not authorize an interstate compact such as RGGI. Because RGGI's constitutionality remains unresolved, there is legal uncertainty about the program that may adversely affect the clean energy investments that any program focused on reducing GHG emissions should be tailored to promote. (NRG)

Response: MassDEP disagrees with NRG's comments that there are legal uncertainties with the RGGI program that may be susceptible to litigation. RGGI does not impose a tax and does not violate state or federal law. NRG's comments raise legal concerns, but NRG's written submittal does not support its legal concerns. Moreover, MassDEP and the other RGGI states have fully explored these legal concerns and have already determined that RGGI does not violate state or federal law. Specifically, RGGI is not a compact in violation of the compact clause of the U.S. Constitution because each of the RGGI states has independent state authority to adopt its own RGGI program and do not rely on the RGGI MOU as its source of authority to adopt the RGGI program or the amendments to the program. Under Massachusetts' independent statutory authority, as written by the legislature, MassDEP has adopted and implemented the RGGI program. Under the existing design, the RGGI program has operated successfully for the past five years, and there have not been any successful constitutional challenges to the existing RGGI program in any of the RGGI states. Because NRG's legal claims do not have a valid basis, MassDEP does not believe that the RGGI program and the amendments to the RGGI program require an overhaul of the RGGI program.

IV. List of Commenters

American Lung Association
Appalachian Mountain Club
Conservation Law Foundation
E2 New England
Environment Massachusetts
Environment Northeast
Harvard University
More than 850 individual residents of the Commonwealth via email
782 individuals via Environment Massachusetts petition
New England Clean Energy Council
Northeast Energy Efficiency Partnerships
NRG
Sierra Club of MA